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10/588,375	08/02/2006	Aurelio Romeo	5059-0104PUS1	8454
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EXAMINER				
GWARTNEY, ELIZABETH A				
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1794				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/588,375

Applicant(s)

ROMEO, AURELIO

Examiner

Elizabeth Gwartney

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/86)
Paper No(s)/Mail Date 20060802
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Objections

1. Claims 12 and 15 are objected to because of the following informalities:

-Regarding claim 12, the symbol “(,” in line 3 appears to be a typographical error.

Appropriate correction is required.

-Regarding claim 15, the word "lo" in the recitation "residual water content lower than 80% by weight, down to lo by weight" appears to be a typographical error. It is unclear if applicant intends "1%", "10%", or some other interpretation. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-5, 9-12, 14-20 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is

(a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance:

- claim 4 recites the broad recitation "dry residue 25%-85%" and "water 75%-15%", and the claim also recites "preferably 30%-80%" and "preferably 70%-20%" which are the narrower statements of the range/limitation.

- claim 5 recites the broad recitation "water insoluble content-between 18%-70%", and the claim also recites "preferably 20%-50%, more preferably 30%-50%" which are the narrower statements of the range/limitation.

- claim 9 recites the broad recitation "animal and vegetable fats solid at room temperature" and "fats liquid at room temperature" and the claim also recites "preferably butter or margarine" and "for example, vegetable oils, preferably olive oil" which are the narrower statements of the range/limitation.

- claim 9 recites the broad recitation "cheese", and the claim also recites "preferably 20%-50%, more preferably 30%-50%" which are the narrower statements of the range/limitation.

- claim 10 recites the broad recitation "oil in water emulsions", and the claim also recites "preferably mayonnaise" which are the narrower statements of the range/limitation.

- claim 17 recites the broad recitation "temperatures in the range 5°C-40°C" and the claim also recites "preferably 10°C-25°C, more preferably 10°C-20°C" which is the narrower statement of the range/limitation.

- claim 18 recites the broad recitation "angular speed from 1 rpm to 20 rpm" and the claim also recites "preferably from 2 rpm to 10 rpm" which is the narrower statement of the range/limitation.

- claim 19 recites the broad recitation "rotation speed being from 1 rpm to 20 rpm" and the claim also recites "preferably from 2 rpm to 10 rpm" which is the narrower statement of the range/limitation.

Regarding claim 11, the recitation "said (,percentage calculated as above indicated" renders the claim indefinite because it is not clear what where the above calculation is found.

Regarding claim 12, the recitation "wherein the amount of hard-grain and grated cheese preferably ranges from 10% to 25%" renders the claims indefinite because it is not clear whether other amounts of cheese could be used and still meet the limitations of the claim. It is unclear as to whether the ranges preferable or required.

Claim 14 provides for the use of compositions as condiments, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 15 recites the limitation "the mass to be filtered" in line 2. There is insufficient antecedent basis for this limitation in the claim. To further prosecution, "the mass to be filtered" will be interpreted as the tomato material previously subjected to "hot break" or "cold break" processes.

Claim 15 also recites the limitations "the mass" and "the filter" in line 5. There is insufficient antecedent basis for this limitation in the claim. To further prosecution, "the mass"

will be interpreted as the recovered pulp and "the filter" will be interpreted as the separation device.

Claim 16 recites the limitation "the tomato juice" and "the tomato passata" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the suspension" in line 4. There is insufficient antecedent basis for this limitation in the claim. To further prosecution, "the suspension" will be interpreted to be the tomato material, i.e. tomato juice.

Regarding claim 20, the recitation "under an oscillatory motion, preferably a nutational motion" renders the claim indefinite. Given that an oscillation is back and forth motion and nutational is spiral motion, it is not clear what motion is being claimed. To further prosecution the motion of the separator apparatus will be interpreted to be rotation or oscillation.

The term "partially" in claim 27 is a relative term which renders the claim indefinite. The term "partially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. To further prosecution, the term "partially" will be interpreted to mean any tomato fruit capable of being processed according to the claimed method.

Claim Rejections- 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 14 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1-14 are rejected under 35 U.S.C. 102(a) as being anticipated by de la Cuadra (US 2003/0224100).

Regarding claims 1-10 and 14, de la Cuadra et al. disclose a tomato-based product made by subjecting tomatoes to a hot break process, separating the resulting product into two streams: one comprising mainly soluble tomato solids or the "thin stream" and one comprising mainly insoluble solids or the "thick stream," concentrating the "thin stream" or serum to yield approximately 30° Brix, and adding the concentrated serum back to the "thick stream" or pulp to obtain a tomato-based product with a ratio of soluble tomato solids to insoluble tomato solids of between 1.0:0.5 and 1.0:2.0 ([0034]). de la Cuadra et al. disclose a tomato-based product, i.e. tomato spread, having about 8% water (i.e. about 5% from the pulp wherein the pulp comprises 7% water and about 3% from the serum wherein the concentrated serum is 30° Brix) and about

67% dry residue wherein the dry residue has a ratio of soluble tomato solids to insoluble tomato solids of 40:60 ([0034]-[0036], [0045]/Example 1). de la Cuadra et al. also disclose that the tomato spread comprises onion, herbs & spices, and olive oil. Further, de la Cuadra et al. disclose a tomato-based product, i.e. ketchup, comprising about 42% water (i.e. about 2.1% from the pulp wherein the pulp comprises 7% water, about 4.2% from the serum wherein the concentrated serum is 30° Brix, and 35.6% added water) and about 30% dry residue wherein the dry residue has a ratio of soluble tomato solids to insoluble tomato solids of about 59:41 ([0034]-[0036], [0045]/Example 2). de la Cuadra et al. also disclose that the ketchup comprises herbs & spices, salt, vinegar and sugar ([0045]/Example 2). Lastly, de la Cuadra et al. disclose a tomato-based product, i.e. tomato mousse or oil-in-water emulsion, having about 12% water (i.e. about 1.7% from the pulp wherein the pulp comprises 7% water, about 2.6% from the serum wherein the serum is concentrated to 30° Brix, and 7.9% added water) and about 23% dry residue wherein the dry residue has a ratio of soluble tomato solids to insoluble tomato solids of about 55:45 ([0034]-[0036], [0045]/Example 5).

Regarding claims 11-12, de la Cuadra et al. disclose all of the claim limitations as set forth above. de la Cuadra et al. also disclose a tomato-based product, i.e. tomato spread, comprising 10.6% olive oil. Given that de la Cuadra et al. disclose a tomato-based product mixed comprising 10.6% olive oil, since solid fats and soft grain cheese are optional, the limitations these claim have been met.

Regarding claim 13, de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that de la Cuadra et al. disclose an oil-in-water type composition, i.e. tomato

mousse, since the tomato solids comprise about 23% of the composition, it is clear that the amount of oil-in-water emulsion must comprise the balance of the composition, i.e. about 77%.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 15-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Cuadra et al. (US 2003/0224100) in view of Succar et al. (WO 03/024243).

Regarding claims 15-16, 18, 20-21 and 23, de la Cuadra et al. disclose a process for making tomato-based products comprising the following steps: (a) subjecting tomatoes to a hot break process; (b) separating the resulting product into two streams: one comprising mainly soluble tomato solids, i.e. serum, and one comprising mainly insoluble solids, i.e. pulp, by mechanical separation; (c) concentrating the separated serum to 30° Brix; and (d) recombining the recovered pulp and concentrated serum streams to obtain tomato-based product with a ratio

of soluble tomato solids to insoluble tomato solids of between 1.0:0.5 and 1.0:2.0 ([0034] and a water content of lower than 80% and greater than 1% (see [0045]/Examples 1-5).

While de la Cuadra et al. disclose concentrating the serum stream, the reference does not disclose concentrating the recovered pulp or pulp stream. Further, de la Cuadra et al. does not explicitly disclose that the starting tomato base is maintained under a slow stirring.

Succar et al. teach a process for making tomato paste comprising processing tomatoes into tomato juice, subjecting the juice to a decanter that separates the juice into two portions (i.e. serum and pulp), concentrating the serum and pulp portions, and recombining the serum and cake portions to produce a tomato paste having improved color, texture, flavor, and nutrition (Abstract). Succar et al. also teach that the tomato material, i.e. juice, is provided to the decanter, the decanter and internal cake scraping auger are rotated (i.e. stirring the tomato juice), and the cake portion is separated from the serum portion (p.9/L11-17, Figure 4). Succar et al. teach that the scraping auger (i.e. centrally placed stirrer, shape of a helix) has a scroll speed differential of 20-40 rpm (p.9/L30-35). Succar et al. also teach that the decanter comprises a cylindrical vessel with openings (*see* Figure 4/Appeture-431).

de la Cuadra et al. and Succar et al. are combinable because they are concerned with the same field of endeavor, namely, processes to make tomato-based products comprising: hot or cold breaking tomatoes, separating the resulting product into two streams: one of serum and one of pulp, concentrating the serum stream, and recombining the two streams. Given that Succar et al. disclose separating tomatoes into serum and pulp portions by mechanical separation, since Succar et al. disclose that it was known to use a decanter to separate the serum and pulp fractions of tomatoes, it would have been obvious to one of ordinary skill in the art at the time of the

invention to have used a decanter that rotates (i.e. stirs) the tomato material during separation, as taught by Succar et al., in the process of de la Cuadra et al. because doing so would amount to nothing more than the use of a known mechanical separating device for its intended use in a known environment to accomplish entirely expected results.

Regarding claim 17, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that de la Cuadra et al. do not explicitly disclose a temperature in which the separation process is carried out, it can be assumed that the process is carried out at ambient temperature, i.e. room temperature (i.e. about 20°C).

Regarding claim 19, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter that rotates, the reference does not explicitly disclose that it rotates at a speed from 1 rpm to 20 rpm. Succar et al. teach that separation can be adjusted by varying the rotation speed of the decanter (p.9/L30-32). As separation efficiency is a variable that can be modified, among others, by adjusting the rotation speed of the decanter, the precise rotation speed would have been considered a result effective variable by one of ordinary skill in the art at the time of the invention. As such, without showing unexpected results, the claimed rotation speed cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the rotation speed of the separation decanter of modified de la Cuadra et al. to obtain the desired separation (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

Regarding claims 22 and 27, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter having walls with openings (see Figure 4/Aperture-431), the reference does not disclose that the width of the openings is not greater than 0.1 mm or higher than 0.1 but not higher than 0.5 mm. As serum purity is a variable that can be modified, among others, by adjusting the aperture in the decanter, the precise opening width would have been considered a result effective variably by one of ordinary skill in the art at the time of the invention. As such, without showing unexpected results, the claimed opening width cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the aperture opening width in the decanter of modified de la Cuadra et al. to obtain the desired serum purity (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

Regarding claim 24, modified de la Cuadra et al disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter in the shape of a cylinder positioned horizontally (see Figure 4), the reference does not explicitly teach the size of the cylinder (i.e. diameter and length). Since the instant specification is silent to unexpected results, it would have been obvious to one of ordinary skill in the art to change dimensions of the decanter, since such a modification would have involved a mere change in the size (or dimension) of a component. A change in size (dimension) is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device,

and the device having the claimed dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

Regarding claim 25, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that Succar et al. teach a decanter to process tomatoes, it is clear that the decanter would intrinsically be of metal material.

Regarding claim 26, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Further, Succar et al. teach sterilizing the fractionated serum and pulp fractions (p.7/L24-26). The ordinarily-skilled artisan would understand that sterilization helps extend product shelf life by inhibiting the growth of unwanted bacteria, yeasts and molds.

de la Cuadra et al. and Succar et al. are combinable because they are concerned with the same field of endeavor, namely, processes to make tomato-based products comprising: hot or cold breaking tomatoes, separating the resulting product into two streams: one of serum and one of pulp, concentrating the serum stream, and recombining the two streams. It would have been obvious to one of ordinary skill in the art to have sterilized the fractionated serum and pulp fractions in the process of modified de la Cuadra et al. for the purpose of extending the shelf-life of the resulting product.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Youssef, et al. "Studies on the quality of tomato concentrate produced in Egypt"
International Food Information Service (IFIS), 1975 (Abstract) provides a comparison
of commercial tomato paste products but does not disclose a tomato paste product
with the ratio of soluble solids to insoluble solids presently claimed.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Gwartney whose telephone number is (571) 270-3874. The examiner can normally be reached on Monday - Thursday; 7:30AM - 5:00PM EST, working alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. G./
Examiner, Art Unit 1794

/KEITH D. HENDRICKS/
Supervisory Patent Examiner, Art Unit 1794